

General Information on DAT Media

Loading a cartridge

Seagate DAT drives have a front-loading cartridge bay for easy operation. The drive-bay door opens automatically when a cartridge is inserted.

After you insert the cartridge, there will be a brief delay while the drive identifies the cartridge type and state, then moves the tape to the data area.

Unloading a cartridge

Do not push eject the button while the Drive Status LED is ON. You may lose data.

Make sure that the drive-status light is not lit. Then unload the cartridge by pressing the eject button. After you press the eject button, the drive automatically flushes the drive buffer to tape, updates the system log, and rewinds the cartridge before ejecting it.

Note: Several seconds may elapse between the time you press the eject button and the time cartridge is ejected. Do not power down the tape drive or the host computer during this time.

Initializing a blank DAT cartridge

When you insert a blank cartridge into the drive for the first time, the drive will take about 10 to 12 seconds to determine that the tape is blank. The drive will automatically initialize the tape the next time it receives a write command from the host computer. Initializing a blank tape takes about 30 seconds. Write operations are completed during the initializing operation without delay until all internal buffers are filled.

Note: Ejecting the cartridge before the initialization is complete causes the procedure to abort. The initialization will restart from the beginning the next time a WRITE command is received.

Note: The data buffer of the drive is flushed to tape if the eject button is pushed, a REWIND command is issued or a delay in SCSI activity occurs. By default, the delay before the flush occurs is set to one minute. However, this delay time can be modified by the host application using a MODE SELECT command.

Writerotecting a OAT cartridge

You can write-protect or write-enable a DAT tape by using the `slin`

DAT Media Notes

Wprotect tab. You can only write data to the tape when the tab is in the closed position.

Cleaning Me tapeheads

Caring for Media

Although tape cartridges are ruggedly built, they must be handled with care. Observe the following precautions:

Store the cartridge in its protective case when you are not using it.

- Keep the cartridge away from dust or dirt.
Keep the cartridge free of moisture. Do not wet or submerge a cartridge in any liquid.
Keep the cartridge away from direct sunlight and heat sources, such as radiators or warm air ducts.
- Do not expose the cartridge to temperature extremes or rapid changes in temperature.
- Keep the cartridge away from sources of electromagnetic fields, such as telephones, computer monitors, dictation equipment, mechanical or printing calculators, motors, and bulk erasers.

DAT cartridge compatibility

Seagate DAT drives are designed to use data-grade DDS DAT cartridges, which comply with ANSI specifications listed in the "3.81 mm Helical-Scan Digital Computer Tape Cartridge for Information Interchange," ANSI X3B51 89-156 standard. To ensure optimal data integrity and reliability, we recommend using Seagate-qualified, DDS DAT cartridges. See the appropriate media chart for your DAT tape drive model.

DDS-2 AND DDS-3 DAT drives also recognize 120-meter MP+ (Metal Particle) cartridges and other MRS (Media Recognition System) cartridges when MRS is enabled. MRS cartridges have a series of alternate opaque and clear stripes at the beginning of the tape. These stripes classify the media as data-grade, rather than audio-grade. Four recognition holes allow the drive to identify the type of tape, determine its magnetic thickness, and to determine whether the tape is prerecorded or unrecorded or is a cleaning cartridge. Other cartridge features allow the drive to optically sense "cartridge in", Beginning-of-tape (BOT), and End-of-tape (EOT).

File Protect Hole
(Restorable) Recognition
Datum Holes 14 Holes (1,2,3,4)
Slider Lock (1)
DAT Media Notes
Slider Lock (2)
(locked by slider)

Further Reading: [DAT Technology Overview](#), discussing helical scan technology, differences between DDS Recording Format levels, Read After Write error correction.

What to do if your tape drive is not detected?

Check the documentation and verify that the drive is running in a supported environment.

If you have an external drive, confirm that it is plugged in and the power switch is on.

Recheck your drive and controller installation and user settings. Make sure that your cables are properly connected and that your drive and host adapter settings do not conflict with other devices installed in your system.

Check the SCSI bus for proper termination.

If your drive is connected to a supported host adapter, be sure you have the appropriate ASPI drivers loaded. See your SCSI host adapter documentation for more information.

Reset power to the tape drive without a tape cartridge inserted in the drive.

Insert a tape in the tape drive. Verify that the "tape inserted" drive light comes on and the tape will properly eject. **Special Note for Seagate STDxxOON or STDxxxOON tape drives:**

Note: This applies to drives with firmware level 6xxx or 7xxx. *Consider the following to see if this might apply to your circumstance:*

Some previous versions of Seagate/Conner backup software, some third party software and some operating systems that access the tape drive directly may require you to change the inquiry string of your DAT drive from "Seagate" (the default) to "Archive". They support a specific list of tape drives and since

These STD drives are new; they will not be on the list.

The software will report to you that the tape drive was not found. The "Archive" name is supported in those situations and the drive will work properly using that name.

1. Shut down your computer system.
2. If your DAT drive is already installed inside your computer, you need to remove it.
3. Turn the drive over to the side with the Seagate sticker and model numbers.
4. You will see a dip switch sticker. Turn S7 to off. This changes the inquiry string from Seagate to Archive.
5. Reinstall your DAT drive into your system and reconnect the power and SCSI cables.
6. Turn your system on and launch the backup software. During the configuration, your drive should be found automatically. If it is not found, check the other items above.

Disc Tape Software